California Monthly Climate Summary December 2006

Summary

December 2006 finished the fall season with near-average conditions. A series of storms moved through the state during December bringing snow to the Sierras, and sub-freezing temperatures and periods of dense fog to the Central Valley. One cold system during the week before Christmas brought frost conditions to Southern California. By Christmas Eve, temperatures in the south rebounded with highs in the 70s and 80s. Towards the end of the month a strong surface pressure gradient led to high winds in parts of the state with gusts of 63 mph recorded at Ridgecrest.

Statewide there were 87 temperature records tied or broken for the month with 68 of them being new record daily minimum temperatures. There were only six days in December that did not record a record somewhere in California. Fresno recorded a maximum temperature of 77° F on December 8 which was the highest temperature ever recorded for the city in December. Los Angeles Airport tied a record set in 1924 for daily minimum temperature of 39° F. Palmdale set a new record low temperature of 20° F on December 18th breaking the old record set in 1935 by 3 degrees. Statewide extremes from the California Data Exchange Center's network of temperature gages are shown below.

The northwest corner of the state received the most precipitation in December. The largest amount of precipitation recorded for December 2006 was at Gasquet Ranger station where 22.55 inches of rain fell. This is 138% of the average December rainfall at this site. The 8-Station Index for northern California precipitation showed 17 days of precipitation for a total of 8.2 inches. This is 101% of the long-term average for December. The south part of the state also moved closer to average precipitation in December. San Francisco recorded 2.29 inches of rain on December 12th making it the second wettest December 12th on record (the wettest Dec 12 was in 1864 when 2.56 inches of rain fell. Prior to this day's rainfall, the city had a July-December rainfall total of only 4.97 inches, or 82% of the long-term average. Crescent City set a daily maximum rainfall record on the 26th with 4.36 inches of rain smashing the old record of 1.99 inches set in 1955. The statewide average precipitation for the fall season is 73% of the long-term average. Additional precipitation statistics for the state's hydrologic regions are shown in the table below.

The El Niño/Southern Oscillation (ENSO) is being classified as a weak/moderate El Niño episode. Equatorial sea surface temperature anomalies for the eastern Pacific are running between 1.2 and 1.3 degrees Celsius, but starting to trend downward. El Niño conditions are expected to last into spring of 2007. Further discussion can be found at http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/. ENSO conditions along with current trends indicate a warmer than average winter for Northern California and an equal chance of above, near, or below-normal temperatures for Southern California. Precipitation forecasts show above normal totals for the next three months for the state south of the Bay Area. Long-range precipitation and temperature outlook plots can be found at: http://www.wrcc.dri.edu/longrang/. General weather information of interest can be found at http://www.wrcc.dri.edu/longrang/. For anomaly information please see http://www.wrcc.dri.edu/anom/cal_anom.html.

Early readings of the state's snow sensor network show snow water equivalent running at 50% of normal with an average of 5 inches in the north, 4 inches in the central, and 4 inches in the south parts of the Sierra.

Rice, cotton, and stone-fruit crop harvests are complete. Grain fields were irrigated in the San Joaquin Valley due to lack of rain. Livestock have been moved to lower elevations with some cattle being fed hay. Cool dry weather continues to help dairy production. Bees are arriving from northern states to over-winter before almond pollination. For further crop information, please see http://www.nass.usda.gov/index.asp

Other Climate Summaries

California Climate Watch (DRI)
Golden Gate Weather Service Climate Summary
NOAA Monthly State of the Climate Report (November report expected after 12/14)

Statewide Extremes

High Temperature – 87 deg F (Beverly Hills, South Coast)
Low Temperature - -22 deg F (Crabtree Meadow, Tulare Basin)
High Precipitation – 22.55 inches (Gasquet Ranger Station, North Coast)
Low Precipitation –0 inches (Blythe, Colorado River Desert)

Statewide Precipitation Statistics (as of 1/17/07)

_		Basins Reporting			Stations Reporting			Percent of Historic Average	
Hydrologic Region	Region Weight	Basins	Dec	Oct- Dec	Stations	Dec	Oct- Dec	Dec	Oct-Dec
NORTH COAST	0.27	5	4	3	19	4	3	118.5%	101%
SAN FRANCISCO BAY	0.03	2	2	2	6	2	2	92.1%	86%
CENTRAL COAST	0.06	3	1	1	11	1	1	85.2%	68%
SOUTH COAST	0.06	3	1	1	15	1	1	55.2%	33%
SACRAMENTO RIVER	0.26	5	3	3	43	15	15	89.9%	77%
SAN JOAQUIN RIVER	0.12	6	4	4	25	12	11	86.1%	71%
TULARE LAKE	0.07	5	4	4	28	14	14	98.0%	63%
NORTH LAHONTAN	0.04	3	1	1	14	2	2	40.2%	54%
SOUTH LAHONTAN	0.06	3	2	2	15	7	7	37.1%	30%
COLORADO RIVER	0.03	1	1	1	6	1	1	0%	4%
STATEWIDE									
WEIGHTED AVERAGE	1.00	36	23	22	182	59	57	87.6%	72.9%

Statewide Mean Temperature Data by Hydrologic Region (degrees F)

	No.			
Hydrologic Region	Stations	Minimum	Average	Maximum
North Coast	34	24.1	40.6	62.0
SF Bay	19	34.9	46.8	61.3
Central Coast	35	35.6	49.6	68.9
South Coast	69	33.2	52.3	76.8
Sacramento	93	22.7	39.8	61.7
San Joaquin	76	22.1	46.6	61.2
Tulare Lake	19	10.7	35.0	62.5
North Lahontan	27	6.3	30.8	52.0
South Lahontan	22	12.7	35.1	58.6
Colorado River	20	34.4	51.4	70.2
Statewide Weighted Average	414	23.0	40.9	62.8